Recovery Plan Action Status

Plan Name: Recovery Plan for the Vermilion Darter, Etheostoma chermocki

Plan Status: Final Plan Date: 06-Aug-07 Lead Agency: USFWS

Lead Office: Mississippi Ecological Services Field Office 965-4900)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Vermilion darter (Etheostoma chermocki)	1	1.1	Determine the magnitude of known and potential threats.	Ongoing Current	FY 2000 - FY 2004		Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Private individual, university, or other research organization, Ecological Services, Society to Advance the Resources of Turkey Creek, Black Warrior- Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Contract	
Vermilion darter (Etheostoma chermocki)	1	1.2	Develop and implement a habitat restoration plan.	Planned	FY 2000 - FY 2004		Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Private individual, university, or other research organization, Ecological Services, Society to Advance the Resources of Turkey Creek, Black Warrior- Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Contract	

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Vermilion darter (Etheostoma chermocki)	1	1.3	Improve and enhance water quality and reduce sedimentation to a monthly average of 10 NTU's or 15mg/L TSS or less.	Planned	FY 2000 - FY 2004		Alabama Department of Environmental Management, Ecological Services, Jefferson County Commission Office of Land Development	Acquisition: General	Contract	Dependent on NPDS permit and local ordinances.
Vermilion darter (Etheostoma chermocki)	1	1.4	Implement actions to restore habitat	Ongoing Current	FY 2000 - FY 2004		Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Ecological Services, Society to Advance the Resources of Turkey Creek, Black Warrior- Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Contract	
Vermilion darter (Etheostoma chermocki)	1	1.5	Urge the EPA and ADEM to conduct a Section 303(d) analysis of Turkey Creek to determine Total Maximum Daily Load for Sediment	Not Started			Ecological Services	Work type not yet selected	Contract	
Vermilion darter (Etheostoma chermocki)	1	2.1	Monitor and measure basic water quality parameters	Not Started			Ecological Services	Work type not yet selected	Labor type not yet selected	
Vermilion darter (Etheostoma chermocki)	2	2.2	Assure adequate funding for enforcement	Not Started			Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Ecological Services	Work type not yet selected	Labor type not yet selected	

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Vermilion darter (Etheostoma chermocki)	2	2.3	Ensure adequate stream management zones (SMZ)	Ongoing Current	FY 2000 - FY 2004		Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Private individual, university, or other research organization, Ecological Services, Society to Advance the Resources of Turkey Creek, Black Warrior- Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Internal Field Assistance	
Vermilion darter (Etheostoma chermocki)	2	2.4	Ensure enforcement of all water quality regulations under the Clean water ACT	Not Started			Alabama Department of Environmental Management, Alabama Deapartment of Natural Resources, Private individual, university, or other research organization, Ecological Services, Society to Advance the Resources of Turkey Creek, Black Warrior- Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Labor type not yet selected	Dependent on NPDS permit and local ordinances.
Vermilion darter (Etheostoma chermocki)	2	3.1	Determine the population structure of the vermilion darter	Not Started			Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Labor type not yet selected	
Vermilion darter (Etheostoma chermocki)	3	3.2	Determine microhabitats essential for the life stages of the vermilion darter	Not Started			Ecological Services	Work type not yet selected	Labor type not yet selected	

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Vermilion darter (Etheostoma chermocki)	3	4.1	Use the surrogate species to answer basic life history parameters	Ongoing Current	FY 2000 - FY 2004		Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Contract	
Vermilion darter (Etheostoma chermocki)	3	4.2	Determine genetic constraints within the limited genetic pool	Planned	FY 2000 - FY 2004		Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Contract, Graduate Student	
Vermilion darter (Etheostoma chermocki)	3	4.3	Determine potential sites for reintroduction and/augmentation	Not Started			Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Labor type not yet selected	
Vermilion darter (Etheostoma chermocki)	3	4.4	Require and assure substrate, water flow, quality, and other environmental requirements of the species are satisfactory and threats abated before any reintroduction and/or augmentation	Not Started			Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Labor type not yet selected	
Vermilion darter (Etheostoma chermocki)	3	4.5	Establish an ark population of vermilion darters	Planned	FY 2000 - FY 2004		Private individual, university, or other research organization, Ecological Services	Work type not yet selected	Contract	
Vermilion darter (Etheostoma chermocki)	3	5	Identify and acquire properties in the Turkey Creek Watershed	Ongoing Current	FY 2000 - FY 2004		Alabama Deapartment of Natural Resources, Ecological Services, Black Warrior-Cahaba Rivers Land Trust, Jefferson County Commission Office of Land Development	Work type not yet selected	Contract	